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POWDER RIVER BASIN
Resource Council

March 12, 2018

Bureau of Land Management, Casper Field Office
Attn: Mike Robinson, Project Manager
2987 Prospector Drive
Casper, WY 82604
Submitted via electronic mail to: blm_wy_casper_wymail@blm.gov

RE: DOI-BLM-WY-P060-2014-0135-EIS (Converse County Oil and Gas Project)

Dear Mr. Robinson,

Thank you for the opportunity to provide comments on the BLM's Converse County Oil & Gas Project ("Project") Draft Environmental Impact Statement ("DEIS"). These comments are submitted on behalf of our organization and on behalf of our members who live, work, ranch, and/or recreate in and near the project area.

By any measure the Converse County Oil and Gas Project is one of the largest oil and gas projects ever proposed in Wyoming. Coupled with the nearby Greater Crossbow project and compounded with thousands of existing oil and gas wells and associated development, the Converse County Oil and Gas Project will in many ways turn a large portion of the Powder River Basin into a single use – oil and gas.

We are greatly concerned about the level of direct, indirect, and cumulative impacts projected to occur from the Project. BLM must do more to protect the quality of life in the Powder River Basin and to protect our precious land, air, water, and wildlife resources.

We expect a complete response to all of our comments provided below, and we look forward to a much-improved EIS and the adoption of an alternative and mitigation measures that will ensure the multiple uses of the Powder River Basin, including people and public health, are able to co-exist with oil and gas development long into the future.

Concerns about the EIS Process

Our organization asked BLM for an extension to the comment period for this DEIS. BLM staff replied that no extensions would be granted because BLM has a commitment to complete the EIS within one year. Regrettably, this means that citizens and citizen groups were unable to have enough time to fully analyze and review the DEIS and the over one thousand pages of technical appendices. BLM has short-changed the public's ability to meaningfully provide comments to the agency.

BLM's denial of the comment period extension – and its rush to complete the EIS – also demonstrates that the agency has pre-determined the outcome of the EIS process, in violation of NEPA. As discussed below, BLM seems unwilling to incorporate public comment and to

consider alternatives and mitigation measures proposed by the public. BLM seems intent on moving forward with its Alternative B – the proposal from the oil and gas operators – no matter what the public comments say. We are greatly concerned by BLM's troublesome – and likely illegal – treatment of the NEPA process.

Alternatives & Mitigation Measures

Because of the significant – and in many ways irreversible – level of impacts resulting from the Project, our organization submitted scoping comments asking BLM to analyze a range of reasonable alternatives, including an enforceable phased development plan. We also suggested numerous mitigation options throughout our scoping comments to reduce impacts in a variety of resource areas. (*See attached scoping comments*).

Unfortunately, BLM chose to ignore all of our organization's proposed alternatives and mitigation measures. We therefore incorporate our scoping comments into these comments on the DEIS and renew our request that BLM consider the proposed alternatives and mitigation measures.

BLM has a duty under NEPA to consider a full range of reasonable alternatives – alternatives which are the "heart" of the EIS. This especially includes reasonable alternatives suggested by the public. BLM also has a duty to consider mitigation measures within an EIS, including mitigation measures proposed through public comments.

BLM did not provide any rationale for rejecting out of hand our proposed alternatives and mitigation measures. To the contrary – such alternatives and mitigation measures would comply with BLM's purpose and need, which includes: "to the extent possible, minimize or avoid environmental impacts." (DEIS at 1-2).

Additionally related to phased development and reclamation, BLM specifically determined that the following topics are within the scope of its review:

> Reclamation • What elements should be required as part of a comprehensive reclamation plan that addresses post-reclamation monitoring, annual reporting, and bonding? • How will the BLM ensure that reclamation requirements are being met?

(DEIS at 1-16). While BLM claims that phased development would be too complicated because of the mixed land ownership in the Project area, BLM has adopted phased development in other oil and gas plans in similar mixed land ownership areas, including the Fortification Creek EA/RMPA. Phased development also complies with the operators' own plan for phasing drilling over a ten year period. BLM could easily divide the area into different years and require phasing, coupled with enforceable reclamation requirements and mitigation thresholds for air, water, and wildlife, similar to the Fortification Creek plan. Even if this is limited to the federal oil and gas estate, there would be a substantial benefit to phasing, ensuring reclamation success, and moderating the socio-economic impacts that result from a boom in drilling and development.

As far as the other alternatives and mitigation measures suggested in our scoping comments, BLM provided no response in the DEIS to why they were not considered. BLM must consider them as part of the NEPA process.

Consideration of alternatives and mitigation measures proposed by our organization – and through other public comments on the Project – is especially warranted because BLM's own alternatives analysis is illegally limited. BLM's Alternative B and Alternative C are virtually the same alternative and propose the same number of wells and the same drilling rate. A true range of alternatives would consider permitting a fewer number of wells and would consider a lower number of wells drilled each year. While Alternative C has fewer well pads and a few other differences, BLM acknowledges that Alternative C does not reduce the impacts from the Project, especially for air, land, and wildlife resources. Nor does it reduce socio-economic impacts.

BLM has done better in other EISs and can do better here. For instance, the Jonah Infill EIS offered an alternative that slowed the rate of drilling, which reduced impacts substantially. The Converse County EIS should expand the alternatives to consider:
- Reducing the number of approved wells;
- Restricting the drilling pace to no more than 250 wells per year for a 20-year development schedule (as opposed to 500 wells per year and 10 years) – and requiring demonstrated reclamation success between phases; and
- Applying more stringent emission control requirements like those enforced in other high-density oil and gas fields such as Jonah-Pinedale, Uintah Basin, and Denver-Julesburg Basin.

Additionally, for almost all impact areas, BLM discloses that no mitigation measures were considered. In other words, the agency completely failed to consider *any* mitigation in both Alternatives B and C. BLM must do better and should consider a full range of mitigation options to reduce the significant – and in many cases irreversible – impacts from the Project.

BLM's Illegal Cost-Benefit Analysis

NEPA requires a full disclosure of the costs and benefits of a proposed agency action. In the case of the DEIS, BLM has disclosed the economic benefits of the Project in terms of estimated jobs and tax revenue but has failed to disclose many of the reasonably foreseeable economic costs. Federal courts have held that if any agency chooses to quantify economic benefits in a NEPA document it must also quantify economic costs. Otherwise, the NEPA document will not be serving its twin purposes of informing agency decision-making and disclosing costs and benefits to the public.

For example:
1) BLM discloses a significant loss of grazing allotments on federal land in the Project area and the loss of pastureland on private and state lands. BLM notes that such reductions in grazing lands "could result in adverse effects on farm income." (DEIS at 4.11-20). However, BLM fails to quantify these economic costs.

2) BLM discloses significant negative impacts to the cost of living within the Project area, including increased housing prices as a result of fast economic growth/inflation, and

corresponding recession after development ends. However, BLM fails to quantify these economic costs.

3) BLM discloses increased costs for emergency services (DEIS at 4.11-29). BLM also discloses increased medical debt as a result of the Project because "hospitals and health care providers in other large-scale energy development communities have reported increases in uncollected debt." (DEIS at 4.11-32). However, BLM fails to quantify these economic costs.

4) BLM discloses significant impacts to air quality and climate change. As discussed below, pollution levels will lead to the violation of health-based ambient air quality standards. Both air pollution and climate change lead to premature death and disease, among other impacts. However, BLM does not quantify any costs stemming from air pollution[1] or climate change – in spite of readily available calculation tools, like the social cost of carbon, available to estimate such costs.[2]

5) As discussed below, BLM fails to disclose lost revenue, including royalties and severance taxes, from flared and vented gas.

BLM must go back and quantify all of these, and any other, economic costs that are reasonably foreseeable consequences of the Project. Otherwise, its EIS will present a one-sided analysis of economic benefits without consideration of costs.

Protection of Public Health

As BLM acknowledges, the majority of the Project area is split estate with federal oil and gas resources underlying private surface lands. This means wells and associated infrastructure will be developed on private land in close proximity to homes and in other areas where members of the public live, work, ranch, and/or recreate.

Regrettably, BLM has completely failed to meaningfully analyze reasonably foreseeable impacts of the Project to public health. BLM should conduct a public health impacts assessment ("HIA") as part of this EIS. NEPA requires incorporation of impacts on the human health environment into its comprehensive impact analysis. When federal actions have significant potential health impacts, a HIA is a tool that can be adapted to meet NEPA's legal standards and administrative processes and CEQ regulations. A number of federal agencies have recently begun voluntarily to use HIA to comply with NEPA's health mandate to analyze public health impacts and to assess mitigation options. Our organization attached numerous studies and information about public health impacts to our scoping comments, which BLM could use as the start of such an analysis. Additionally, Physicians, Scientists, and Engineers for Healthy Energy has a repository of studies available on their website: https://www.psehealthyenergy.org/our-work/shale-gas-research-library/

Additionally, BLM's DEIS analysis is flawed in several key ways:

[1] The Global Bank has estimated global air pollution costs at $225 billion per year. http://www.worldbank.org/en/news/press-release/2016/09/08/air-pollution-deaths-cost-global-economy-225-billion
[2] https://19january2017snapshot.epa.gov/climatechange/social-cost-carbon_.html

1) BLM considers some direct public health impacts, but fails to consider indirect impacts, such as loss of sleep, additional stress, psychological distress, and quality of life impacts from living with oil and gas development. Many oil and gas health studies show that increased noise and light pollution, and increased stress are a significant cause of public health impacts in communities affected by oil and gas development, and in the short-term these indirect causes may be even more harmful than air or water pollution. [3] BLM must consider direct, indirect, and cumulative impacts to public health as part of its NEPA analysis. Analysis must be of both short and long-term public health impacts.

2) BLM bases much of its analysis on reports prepared by the oil and gas industry. For instance, the 2013 Gradient report referenced in the DEIS was prepared for Halliburton.[4] It appears to use selective sampling and assumptions. We ask BLM to use peer-reviewed literature to support the scientific integrity of the DEIS's conclusions regarding public health. As mentioned above, the Physicians, Scientists, and Engineers for Healthy Energy database is a great source for these studies.

3) BLM incorrectly assumes that the WOGCC setback distance between homes and oil and gas wells is 500 meters (DEIS at 4.1-27). The WOGCC regulatory setback distance is 500 feet (approximately 152 meters). This incorrect assumption makes BLM's analysis of noise, light, and air pollution fundamentally flawed. Since the DEIS does not quantify the well-to-residence setback needed to adequately protect public health (only the gas plant and compressor station setbacks are quantified), it is possible that this threshold is somewhere between 500 and 1,640 feet and therefore exceeds the WOGCC requirement. In this event, the implied protection from WOGCC regulations is nonexistent.

4) BLM does not consider *any* mitigation measures for public health and specifically does not consider measures to reduce impacts from noise and light pollution. In order to mitigate impacts to public health, BLM must – at a minimum – apply its ¼ mile setback to all wells in the Project area. BLM must also consider additional mitigation measures to reduce noise and light pollution, such as barrier walls and locating wells and oil and gas infrastructure in places that make use of natural barriers like hills and trees. This is critical to mitigate the unhealthy levels of noise from construction and drilling activity disclosed in the DEIS (*see* DEIS at 4.1-27).

Impacts to Water Resources

BLM's impacts analysis related to groundwater is fundamentally flawed. While the agency discloses significant water needs for the project (*see, e.g.* DEIS at 2-12), BLM downplays the impacts to regional water sources by claiming that the "estimated consumption of groundwater by development under Alternative B would represent a small portion (0.08 percent) of the groundwater resource. Therefore, consumption under Alternative B would have a negligible impact on groundwater resources." (DEIS at 4.16-15). BLM does not conduct its impacts

[3] *See* https://wvutoday.wvu.edu/stories/2016/12/22/noise-pollution-from-oil-and-gas-development-may-harm-human-health (attached); http://www.environmentalhealthproject.org/health-issues/noise-light-vibration

[4] The full citation is Gradient. 2013. National Human Health Risk Evaluation for Hydraulic Fracturing Fluid Additives. Prepared for Halliburton Energy Services, Inc., Houston, Texas, May 1, 2013.

analysis at the appropriate scale, anticipating drawdown in both local and regional aquifers and assessing the significance of that drawdown in the short and long-term timeframes.

BLM has learned some hard lessons regarding its groundwater impacts analysis from its approval of coalbed methane wells and coal leasing in the Powder River Basin. BLM has previously acknowledged in NEPA documents that its federal actions have contributed to complete dewatering of local aquifers. BLM cannot permit further development that will exacerbate those impacts *without* considering appropriate mitigation measures.

BLM must consider the robust body of research and analysis on water impacts from fossil fuel development in Wyoming and around the region[5] and must evaluate direct, indirect, and cumulative impacts to water resources, especially the Fort Union Formation. BLM must also evaluate and adopt mitigation measures to reduce reasonably foreseeable impacts.

Air Quality

BLM discloses that there will be violations of health-based ambient air quality standards if the Project is allowed. Therefore, this Project fails to comply with BLM's and the USFS's obligations under their management plans and FLPMA to maintain compliance with air quality standards.

Additionally, BLM's analysis for air quality impacts is concerning and flawed in the following ways:

1) The greatest air quality risk posed by the Project is ozone impact. Appendix A of the DEIS, the Air Quality Technical Support Document (TSD) presents several combinations of models, bias corrections, and adjustments to agree with area monitors. These scenarios introduce more confusion than clarity. One version of the analysis shows a maximum additional impact of 0.039 ppm (4th high 8-hour average) in the Project area. Recent monitoring in Converse and Campbell Counties shows ozone values ranging from 0.06 ppb to 0.068 ppb. At the high end of the monitored values, an additional 0.039 ppb would lead to an exceedance of the 0.070 ppm standard.

2) More importantly, the model results do not instill confidence given monitored ozone impacts in other heavily developed regions. Added to current oil and gas impacts, the predicted 10,000 tons per year of Project NO_x and 15,000 tons per year of Project VOC emissions – both ozone precursors – are on the order of those in the Uintah Basin and the Jonah-Pinedale area. Both of those areas are in non-attainment due to oil and gas development. Indeed, the modeling done for the Converse County DEIS confirms high predicted values of 0.089 ppm in the High Uintas Wilderness Area and 0.076 ppm at the Boulder ozone monitor – both due to nearby ozone precursor emissions from oil and gas development. It is likely that the difference in model-predicted ozone concentrations between existing high-density developments and the proposed Project is not because of safe levels of ozone precursors but more as a result of the scarcity of representative monitoring data to calibrate the ozone model for Converse County.

[5] We have attached some of these resources to these comments, but there is a wide variety of analysis available to BLM.

3) Maximum modeled 24-hour PM_{10} concentrations from the Project exceed the standard by up to 300%, as presented in Table 3.3-31 of the TSD. They are attributed to the ongoing field development phase, but not meaningfully incorporated into the conclusion of air quality impacts (limited to one very brief and qualitative sentence in Section 9.1 of the TSD). The DEIS minimizes the significance of modeled exceedances and provides for no mitigation measures. In fact, Section 4.1.3.8 states that "no mechanism exists to provide for compensatory mitigation of residual impacts associated with PM10 air quality impacts." The DEIS instead defers to the state and federal regulatory framework as a safety net to prevent what the model predicts to be excessive impacts. This logic implies that in those instances where the Project air quality analysis predicts unacceptable impacts, there is no need to worry because such impacts could never actually be permitted. This provides an end run around meaningful analysis and consideration of mitigation measures because BLM is assuming that the air quality standards are the safety net yet fully acknowledges that the standards will be exceeded.

4) The DEIS does not present modeling results for Alternative C. Given the predicted PM_{10} exceedances discussed above, and the reduced surface activity inherent in Alternative C, this alternative should be modeled for PM_{10} impacts.

5) The DEIS minimizes visibility impacts despite the admission that critical thresholds are exceeded. Section 9.2 of the TSD states that "the only Class I areas that would have impacts over the 0.5 delta deciview (dv) level are Badlands NP and Northern Cheyenne IR." This statement implies that either the impacted areas are not important enough to warrant concern, or that the change in deciviews is not high enough. But the 0.5 threshold was established by federal land managers for a good reason: for most humans it is the minimum perceptible reduction in visibility. Table 6.4-1 of the TSD shows that for Badlands NP, the modeled 98th percentile impact is 0.64 dv, the maximum impact is 1.44 dv, and visibility would be impaired (greater than 0.5 dv) for 9 days per year. These are not insignificant impacts. Moreover, the model shows the Converse County Project would impair visibility at Fort Laramie National Historic Site, a sensitive Class II area, for 25 days per year.

6) Mitigation measures are referenced throughout the DEIS, but inadequately specified. Mitigation measure AQ-1 establishes a minimum setback (to residences) of 2,000 meters for gas plants and compressor stations, but in general mitigation is characterized as "site-specific." BLM should ensure that all air quality mitigation measures are uniformly applied and enforceable.

7) In Table 3.4-17 of the TSD, AERMOD predicts significant formaldehyde impacts. For a gas plant and two 16-well pads the maximum impact is over 50% of the USEPA reference exposure level. Yet, the DEIS offers no discussion of what these impacts mean for human health, or how they could be mitigated.

8) Analysis of impacts from hazardous air pollutants was limited to discussing increased cancer risk. Other impacts, including economic impacts and public health impacts, of HAPs were not disclosed. (*See* DEIS at 4.1-18; 4.1-35). HAPs contribute to a variety of health impacts as shown in the table below, and not all HAPs are carcinogens.

Air Toxics Associate with Oil and gas Operations (Pollutants reported at 10 or more sites) [6]

Pollutant	Carcinogen	Other Health Impacts
Carbonyl sulfide		Respiratory ; Nervous system
Hexane		Nervous system
Toluene		Nervous system; Respiratory; Development
Benzene	X	Immune System
Xylenes (mixed)		Nervous system
Ethyl benzene	X	Development; Liver; Kidney; Endocrine system
Methanol		Nervous System; Development
2,2,4-Trimethylpentane		?
Ethylene glycol		Respiratory; Kidney; Development
Naphthalene	X	Respiratory
Chlorobenzene		Alimentary system; Kidney; Reproductive system
m-Xylene		Nervous system
p-Dichlorobenzene	X	Alimentary system; Kidney; Reproductive system
Formaldehyde	X	Respiratory
Cumene (isopropylbenzene)		Kidney
Carbon disulfide		Nervous System ;Reproductive System
Phenol	X	Respiratory; Cardiovascular; Kidney; Nervous System
Acetaldehyde	X	Respiratory
PAHs	X	

Given the serious level of impacts to air quality – and the full acknowledgement in BLM's analysis that the Project will contribute to violations of air quality standards – BLM must consider a full range of enforceable mitigation measures demonstrated to reduce air pollution to acceptable levels. Converse County residents should not have to wait for nonattainment status before well-established control technologies are applied to oil and gas activities in their area.

For instance, BLM must apply measures to reduce air pollution that the oil and gas industry is already using in the Upper Green River Basin. The Jonah Infill EIS contains considerable detail on mitigation measures and sets alternative levels of emission reductions (20%, 40%, 60%, and 80%). Measures specified in the Jonah Infill EIS and other regional planning documents include:

[6] USEPA 2012 National Emission Standards for Hazardous Air Pollutants (NESHAP): Oil and Natural Gas Sector.

- Engine tier levels and SCR control for reducing NOx emissions from drilling engines, compressors, and generators
- Green completions (flareless), or limitations on the amount of gas that can be flared prior to 100% capture and utilization
- Combustion and vapor recovery units to minimize VOC emissions from flashing, dehydration systems, storage tanks, and truck loading
- Using closed storage tanks (crude and produced water) with 98% VOC emission controls
- Using no-bleed pneumatic controllers to minimize VOC and methane emissions
- Limitations on the number of crude-hauling trucks that can be used before pipelines are in place
- Enforceable leak detection and repair (LDAR) program to minimize fugitive VOC and methane emissions

These mitigation measures have been shown to be reasonable for other BLM oil and gas projects and must be considered for this one.

BLM should also require additional air quality monitoring as part of its adaptive management for the Project.

Flaring & Venting

BLM fails to disclose the anticipated amount of gas that will be flared and vented under the Project. BLM also fails to disclose anticipated revenue losses from lost royalties and taxes as a result of flaring and venting, analysis that was called for through our scoping comments.

Notably, BLM contradicts itself in the DEIS by first claiming that flaring would only occur during well production testing and emergencies (DEIS at 2-12) but later claiming that approximately 10% of the wells will flare gas for the first six months of production. (DEIS at 4.1-2).

BLM's analysis fails to consider the recent history of flaring at oil and gas wells in the Powder River Basin. BLM could easily take data from the WOGCC (or its own internal data) and reasonably estimate the likely amount of flaring that would occur under the Project. BLM must provide this estimate in its DEIS, along with an impacts analysis of public health consequences, air pollution, climate change, and lost revenue. BLM must also consider – and adopt – mitigation measures related to flaring and venting.

Climate Change

BLM violated NEPA by failing to provide both a quantitative and qualitative assessment of greenhouse gas emissions and impacts within the DEIS. Notably, BLM claims that "it is not possible to assign a 'significance' value or impact to these numbers, the emissions estimates themselves are presented as a proxy for potential climate effects." (DEIS at 4.1-16). Later the DEIS says:

> While it is generally agreed upon that human activities are changing the composition of Earth's atmosphere, questions remain about how much warming will occur, how fast it

> will occur, and how it will affect the rest of the climate system. Neither Alternative B nor Alternative C would be expected to produce detectable effects to global climate resources. However, it is not possible to quantify any effect (positive or negative) of the Project-only GHG emissions on climate with any degree of certainty.

(DEIS at 4.1-37). [7]

These statements are somewhat remarkable given the state of climate science. There is now a well-established scientific understanding that the global increase in temperature due to greenhouse gas emissions must be limited, at or below 2°C, to avoid unmanageable climate change consequences. There is great consensus around the need to rapidly transition away from fossil fuels in order to avoid catastrophic effects of climate change – effects which are local, regional, national, and global in scope.[8]

There is also great consensus around the extent to which BLM managed federal minerals are contributing to climate change. A new report from The Wilderness Society (attached) documents that greenhouse gas emissions associated with oil, gas, and coal developed on public lands is equivalent to one-fifth or more of total U.S. emissions; meaning if U.S. public lands were a country, it would rank 5th in the world in total emissions behind China, India, the United States and Russia.

The Wilderness Society analysis finds that emissions associated with federal lands energy development need to be reduced from 1.52 billion tons carbon dioxide equivalent (CO2e) per year to between 1.16 billion and 1.13 billion tons CO2e per year by 2025 to be in-line with economy-wide reductions needed to climate goals. The analysis concludes that CO2e emissions from federal lands is on pace to exceed these targets by roughly 300 million tons or 25%. While this Project is but a part of the problem, it is clearly a part that must be fully acknowledged by BLM. Since the scientific literature shows that greenhouse gas emissions at current levels are already unsustainable, *any* emissions from this Project will contribute to catastrophic climate change impacts.

BLM also failed to uphold its duty to consider alternatives and mitigation measures to reduce greenhouse gas emissions and associated climate change impacts. Please do so as part of this NEPA process.

Sage-grouse

As shown in the table copied below, BLM's analysis fully discloses that the Project will contribute to exceedances of disturbance thresholds for core areas and BLM designated PHMAs, in violation of BLM's and the USFS's planning documents – and in violation of Wyoming's core areas protection framework.

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[7] The DEIS also states: "However, Project related GHG emissions would become well-mixed throughout the global atmosphere, and GHG-related climate change effects would be due to contributions from a multitude of both man-made and naturally occurring global GHG emissions. Therefore, the effects of climate change due to GHG emissions from any particular source (such as the Project) are not possible to determine." (DEIS at 5-23).

[8] See https://link.springer.com/article/10.1007%2Fs10584-018-2152-z

Table 4.18-26 Existing and New Surface Disturbance in Greater Sage-grouse PHMA under Alternative B

PHMA[1]	Size of DDCT Assessment Area (acres)	Surface Disturbance in the DDCT Assessment Area					
		Existing		New		Total	
		Acres	Percent	Acres	Percent	Acres	Percent
Bill	4,054	67	1.7	142	3.5	209	5.1
Douglas	88,195	23,328	26.5	3,092	3.5	26,420	30.0
M Creek	26,445	239	0.9	927	3.5	1,166	4.4
North Glenrock	118,201	12,129	10.3	4,144	3.5	16,273	13.8
Thunder Basin	81,953	7,967	9.7	2,873	3.5	10,840	13.2

[1] Based on BLM/USFS PHMA and Core Area Version 3 Maps.

BLM concludes that "The programmatic nature of this document details that the current 5 percent disturbance cap is 1 exceeded in four of the PHMA (Bill, Douglas, North Glenrock, and Thunder Basin)." For the fifth, the disturbance level is dangerously close to the cap at 4.4%.

BLM must do more to protect sage-grouse habitat and populations, both inside and outside of core areas.

Cumulative Impacts

BLM appears to be underestimating the level of reasonably foreseeable cumulative impacts in and adjacent to the project area. BLM's analysis focuses on "past and present" cumulative activity but ignores reasonably foreseeable future activity.

Of note, there are over 8,000 APDs approved by the WOGCC in Converse County at this time, and over 4,000 approved in adjacent Campbell County

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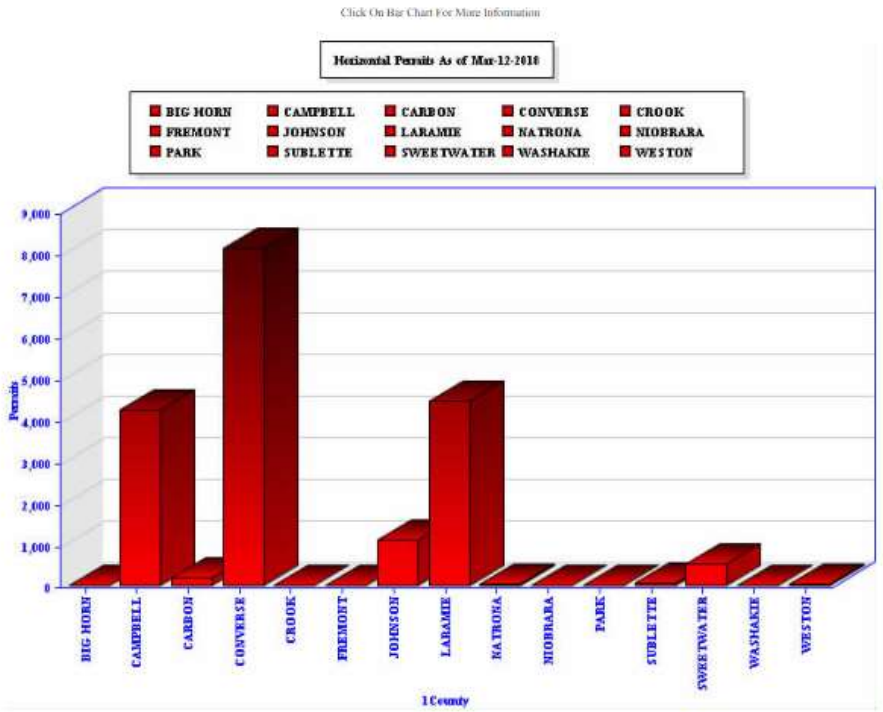

Source: WOGCC website: http://wogcc.state.wy.us/HorizontalState.cfm?Oops=1

These wells are reasonably foreseeable as they are permitted by the WOGCC. The impacts of the wells and associated development must be considered within the scope of BLM's EIS.

Additionally, BLM does not consider the pending West Antelope III coal lease application[9] since the BLM merely considers past and present coal mining activity. (DEIS at 5-11). Please revise the cumulative impacts analysis to include consideration of all pending coal lease applications. In particular, BLM should coordinate its climate analysis with the pending NEPA analysis of climate impacts for the Wright Area Coal Leases EIS remand.[10]

Subsequent NEPA Process & Relationship to the APD Stage

In many places in the DEIS, BLM defers critical environmental impacts analysis, based on the assumption that there will be future NEPA analysis at the APD stage. For instance, the DEIS says:

> Prior to drilling on BLM- or USFS-administered surface and mineral estate, the project proponent must submit an APD to the BLM or USFS, as appropriate, which would include a Surface Use Plan of Operation and a Drilling Plan. At that time, the BLM/USFS would conduct a site-specific NEPA review and attach appropriate measures to the permit to protect natural and human resources.

(DEIS at 1-5). Later the DEIS states:

> Due to the size of the area of potential effects and inability to perform analyses at the appropriate level to determine specific impacts, a programmatic analysis followed by subsequent tiered NEPA is appropriate for the proposed development in the CCPA.

(DEIS at 4-1).

First, even assuming there will be "a site-specific NEPA review" at the APD stage, that subsequent analysis does not abdicate BLM from conducting a full environmental impacts analysis at this programmatic stage. NEPA requires analysis of environmental and socio-economic impacts at the earliest possible point: now.

Second, these statements underscore the need for BLM to commit to subsequent NEPA analysis at the APD level. Too often BLM approves new oil and gas wells in the Powder River Basin through categorical exclusions or determinations of NEPA adequacy (DNAs). Given how the agency defers critical analysis of Project impacts to the APD stage, BLM must require all APDs under the Project to be approved through an EA, with a draft open to public notice and comment (not merely a 30 day "posting" period as is commonly used by the agency). A site-specific level EA tiered to this programmatic analysis would be akin to the NEPA framework approved in the

[9] https://eplanning.blm.gov/epl-front-office/projects/nepa/67310/105368/158583/WestAntelope3LBA.pdf
[10] *See* DOI-BLM-WY-P000-2018-0002-EA. Although we disagree that the analysis required by the remand should be done in this manner, the coal leases are cumulative impacts that should be considered within the scope of this EIS.

2003 coalbed methane EIS. Please include the commitment for site-specific NEPA in the final EIS/ROD.

Need for Management Plan Amendments

Remarkably, the DEIS fails to disclose why the BLM and USFS have abandoned the previous commitment for plan amendments along with Project approval. (*See* DEIS at 1-6, discussing conformance with management plans). It appears that the agencies are arbitrarily reversing their previous determination that the Project exceeds the scope of the management plans. The current management plans did not anticipate this level of development and the Project therefore exceeds the scope of the RFD for the plans.

At the very least – should BLM proceed with the selection of its flawed Alternative B – the agency must include proposed plan amendments to allow the waiver of timing stipulations and BLM setback requirements as those stipulations are requirements of the current management plan (carried forward in oil and gas leases for the Project area) and cannot be altered absent a plan amendment. BLM should re-notice the draft DEIS and include a proposal for management plan amendments, as originally contemplated by the agency.[11]

Need for Stakeholder Engagement in Adaptive Management

BLM must establish a framework to monitor impacts stemming from the Project through enforceable commitments in the ROD. We ask BLM to establish a stakeholder working group with participation from conservation groups and local landowners. This working group should meet at least annually to review research and analysis conducted by a variety of state and federal agencies. The adaptive management plan should also provide operator provided financial commitments for scientific research, monitoring, and other needs.

Conclusion

For all of the reasons above – and many others raised by other organizations and the general public – BLM must go back and significantly revise its DEIS and re-notice it for public comment, along with proposed management plan amendments.

Thank you for your time and consideration of these comments. Please keep us updated on the progress of this EIS and notify us of any future comment opportunities or public meetings.

Sincerely,

Shannon Anderson
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[11] https://eplanning.blm.gov/epl-front-office/projects/nepa/66551/113795/139032/NOI_Fed_Reg_May_16,_2014.pdf